
NAVFAC IGS-12490 (MAY 2002)

Preparing Activity: LANTNAVFACENGCOM Based on NFGS-12490B

ITALIAN GUIDE SPECIFICATIONS

Use for ITALIAN projects only

SECTION 12490

BLINDS, VENETIAN (AND AUDIO VISUAL)
05/02

NOTE: This guide specification is issued by the
Atlantic Division, Naval Facilities Engineering
Command for regional use in Italy.

NOTE: This guide specification covers venetian
blinds including audio visual venetian blinds.

NOTE: The following information shall be shown on
the project drawings:

1. Location, number, and size of windows to receive
blinds; either as part of a window schedule, a
separate schedule, or on plans and elevations.
2. Whether installation shall be inside or outside
the window opening and whether window stools project
beyond inside trim line.
3. Clearances for operation of blinds.
4. Details of recessed pockets, where required.

Comments and suggestion on this specification are
welcome and should be directed to the technical
proponent of the specification. A listing of _
technical proponents, including their organization
designation and telephone number, is on the Internet.

Use of electronic communication is encouraged.

Brackets are used in the text to indicate designer
choices or locations where text must be supplied by

the designer.

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

ITALIAN NATIONAL ASSOCIATION FOR UNIFICATION OF STANDARDS (UNI)

NOTE: A UNI Norm is a technical normative recognized as Italian Law, submitted by a private organization "Ente Nazionale Italiano di Unificazione" for Italy and is available only in the Italian language. It is the National Standard.

UNI 10818 (1999) Windows, doors, blinds and shutters
- Guidelines for installation

1.2 SUBMITTALS

NOTE:

Submittals must be limited to those necessary for adequate quality control. The importance of an item in the project should be one of the primary factors in determining if a submittal for the item is required.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Recommended codes for Army projects are "RE" for Resident Engineer approval, "ED" for Engineering approval, and "AE" for Architect-Engineer approval. Codes following the "G" typically are not used for Navy projects.

Submittal items not designated with a "G" are considered as being for information only for Army projects and for Contractor Quality Control approval for Navy projects.

Submit the following in accordance with Section 01330, "Submittal Procedures."

SD-03 Product Data

Blinds

Audio visual blinds

SD-04 Samples

Blinds; G

Audio visual blinds

Submit one complete unit of each type specified, labeled for identification. The Contracting Officer will deliver approved samples to the site; if in good condition and otherwise suitable, the samples may be installed in the work. Identification and approval marks shall remain undisturbed until final acceptance. Colors shall be as specified in paragraph entitled "Colors for Slats, Tape, Cords, and Exposed Metal."

1.3 DELIVERY AND STORAGE

Deliver the blinds to the site in the manufacturer's original containers with the manufacturer's name and container contents clearly labeled. Store in a safe, dry, clean, and well-ventilated area. Do not open containers until needed for installation unless verification inspection is required.

PART 2 PRODUCTS

2.1 SOURCE MANUFACTURERS

2.1.1 Blinds and Audio Visual Blinds

The following manufacturers have products that generally comply with these specifications:

EMMETRE

Via Trezza, 12
30027 S. Dona di Piave (VE)
Tel: 0421-480592
Fax: 0421-480593

METALFLEX di Renzo Muraro & C. snc

via E. Fermi, 15
36071 Arzignano (VI)
Tel: 0444-672001
Fax: 0444-450548

MOTTURA S.p.A.
Via XXV luglio, 1
10090 San Giusto Canavese (TO)
Tel: 0124-494949
Fax: 0124-494918

2.1 BLINDS

2.1.1 Blind Units

Free hanging design with horizontal slats adjustable to various angles and various heights. The venetian blinds shall be constructed so as to be easily removed from the windows and individual components must be removable for replacement if necessary, without damage to the blind unit. For units wider than 1200 mm, provide intermediate support brackets, additional tilting rod supports, and other upgrades as recommended by manufacturer for weight and size of blind.

2.1.2 Size

As indicated.

2.2.3 Head and Bottom Rails

Head rail shall be in one piece of U-shaped construction. Head and bottom rails shall be of sufficient thickness, strength, and rigidity so that there will be no twisting, sagging, or distorting when installed.

2.1.3 Slats

NOTE: Aluminum slats should be specified, unless justification exists for using steel. Steel slats have a tendency to cut the thin-line tape used with slats.

NOTE: Select one of the following bracketed paragraphs. The first paragraph is based upon FS AA-V-00200, Type I (50 mm) slat. The 2nd paragraph below is based upon FS AA-V-00200, Type II (25 mm) slat.

NOTE: Steel blinds are not commonly available. Should steel blinds be required, designer shall locate manufacturers for such and edit this specification to match products available.

[Aluminum, nominal 0.20 mm thick, 50 mm wide macro-blinds. Slats shall be

painted with [a single color] [2 color] baked enamel, anti-static paint coating. Ends of the slats shall be cut at right angles to the sides; corners shall be rounded. Finished slats shall have a maximum crown of 6 mm and have sufficient flexibility to permit a 3.14 rad bend on both the convex and concave sides without permanent deformation.]

[Aluminum, nominal 0.24 mm thick, 25 mm wide mini-blinds. Slats shall be painted with [a single color] [2 color] baked enamel anti-static paint coating. Ends of the slats shall be cut at right angles to the sides; corners shall be rounded. Finished slats shall have a maximum crown of 6 mm and have sufficient flexibility to permit a 3.14 rad bend on both the convex and concave sides without permanent deformation.]

2.1.4 Ladders

Ladder cords shall be polyester cables with 20 mm vertical rung spacing. Horizontal rungs shall consist of two cables interbraided into the vertical component of the ladder.

2.1.5 Pull Cords

Braided polyester or synthetic fiber, ends heat-fused, terminated with a plastic tassel, or continuous. Cords shall be of sufficient length for convenient and efficient use and shall be easily detachable and replaceable. Cords shall be the same color as the slats unless otherwise indicated.

2.1.6 Tilting Device

NOTE: Tilting device should be specified on right side only when an unusual condition exists.

Locate on the [left] [right] side. Tilting device shall be a cord-adjustable type using a hanging transparent plastic tilting rod, securely attached to head rail and operated from the front of the blind, and shall securely hold the tilting rod, slats and bottom rail at any set angle. [For two-color slats, device shall stop slats at no greater than a 1.22 rad. upward angle from the horizontal and a zero rad. downward angle from the horizontal when viewed from inside the room; permitting only the top color exposed to the outside.]

2.1.7 Lifting Cord Locks

Locate on the [side opposite] [same side as] the tilting device enabling the blind to stop [at any height] [only at completely raised position] of window opening.

2.1.8 Holddown or Sway-Stop Brackets

NOTE: Holddown brackets should not be specified for windows except where air movement may cause the

blinds to sway excessively. Delete this paragraph
when not applicable.

Provide where indicated.

2.1.9 Color for Slats, Tape, Cords, and Exposed Metal

NOTE: Select the applicable paragraph(s) from the
following:

[[As shown] [Manufacturer's standard off-white] [One color as selected from
the manufacturer's standard color samples] [____].]

[Two-color slats. Top of slat: [____]. Bottom of slat [____]. Tape
cords and other exposed metal: [____].]

2.2 AUDIO VISUAL BLINDS

NOTE: Audio visual blinds are special purpose
blinds to be used only when a greater than ordinary
exclusion of light is required. Manufactures
recommendations for color selection should be used
or careful selection of the color for optical
properties must be considered in audio visual
applications. Delete when not required.

In addition to requirements for blinds, each unit shall include light traps
at sides, and sill. Construct light traps from aluminum or sheet steel,
not less than 0.5 mm thick, U-shaped, with legs not less than [45 mm long
for 50 mm blinds.] [20 mm long for 25 mm blinds.] Edges in contact with
blinds shall be rounded or beaded. Finish inside surfaces of light traps
in a dull black color. Design blinds to eliminate all visible light gaps
if slats are tilted closed; with tight tape spacing and slates with minimal
sized rout holes for ladders hidden and placed near back edge for maximum
slat overlap; with head rail and bottom rail extended and formed for
light-tight joints between rail and adjacent slats or construction.

PART 3 EXECUTION

3.1 INSTALLATION

Install blinds after the work of other trades, including painting, is
substantially done. Install blinds level and in accordance with UNI 10818
and manufacturer's recommended installation instructions as approved.
Isolate metal parts from direct contact with concrete, mortar, or
dissimilar metals. Ensure blinds installed in recessed pockets can be
removable without disturbing the pocket. The entire blind, when retracted,
shall be contained behind the pocket. For blinds installed inside jambs
and mullions, locate blinds so that exterior louver edges in any position

are not closer than 25 mm. For blinds installed outside the jambs and mullions, overlap each jamb and mullion 20 mm or more when the jamb and mullion sizes permit. Include all hardware, brackets, anchors, fasteners, and accessories necessary for a complete, finished installation.

NOTE: Retain or revise one or more of the paragraphs below, or delete all if mounting is shown on drawings.

[a. Flush Mounted: Install blinds with louver edges flush with finish face of opening if slats are tilted open.

] [b. Jamb Mounted: Install head rail flush with face of opening jamb and head.

] [c. Head Mounted: Install head rail on face of opening head, outside of the jamb and mullions.

] [d. Recessed: Install head rail concealed within blind pocket.

] 3.2 LOCATION

NOTE: If "specified" is used, insert the room or area number(s) and the quantity of blinds required for each. Do not specify sizes of blinds.

Install blinds at locations [as indicated] [specified]. Provide the required quantity of blinds and carefully check the dimensions of all openings in the facility for exact sizing of the blinds to be provided.

[Room or area	Number of blinds required
[_____]	[_____]

] 3.3 IDENTIFICATION

NOTE: Projects requiring large quantities of blinds or a variety of blinds may need a numbering plan.

In accordance with the numbering plan, mark each opening and the corresponding blind with identical numbers. For multiple windows separated by mullions, the space required by each blind shall be numbered separately. Use brass, aluminum, plastic, durable paper plates, or stamp to place corresponding numbers on unexposed surfaces of openings and the head box. Fasten plates to the back of head box and to the sill track.

] 3.4 AUDIO VISUAL BLINDS FIELD TEST

3.4.1 Performance

NOTE: The value of lx should be selected depending upon the application; that is room size, type of projection screen being used, and type of projection equipment being used. This value may range from one to 54 lx. Consult audio visual manufacturers for current recommendations.

When closed against full midday summer sunny conditions, installed audio visual blinds shall be capable of reducing the natural light level of the space to [_____] lx.

3.4.2 Field Test

The Government will perform test for light intensity prior to acceptance. Failure of the blinds to reduce the natural light level to the average lx specified above shall be cause for rejection.

-- End of Section --